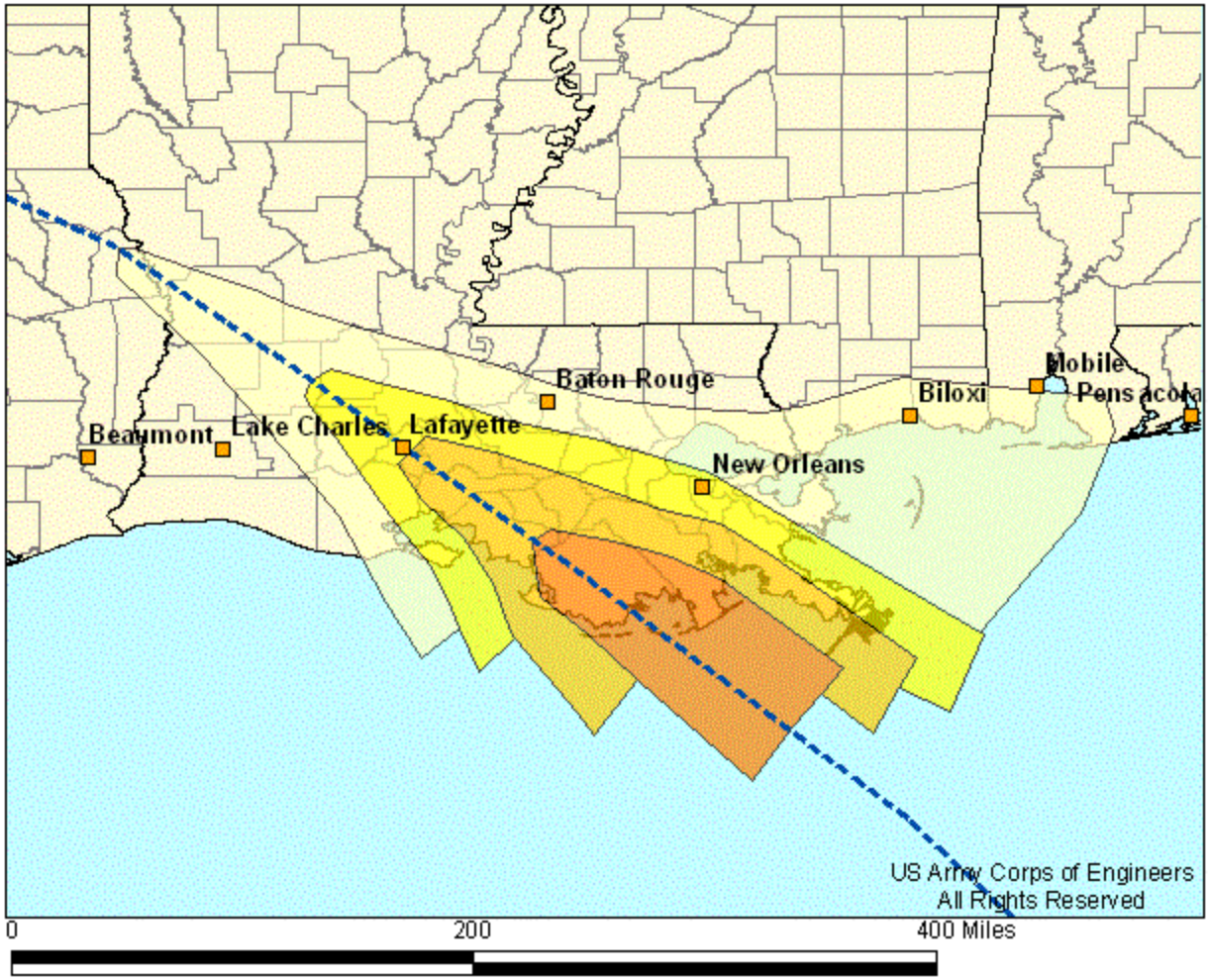
US Army Corps of Engineers

Hurricane Gustav Projected Damage Areas

Landfall Expected In About 19 Hours

For Planning Purposes Only!



Post Landfall Projected Damage Areas

This model is based on a Category 3 storm making landfall south of Houma, LA.

Forecast Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a Category 3 storm making landfall south of Houma, LA. These projections are based on information from the NHC (1700 EDT 08/31/2008) forecast.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

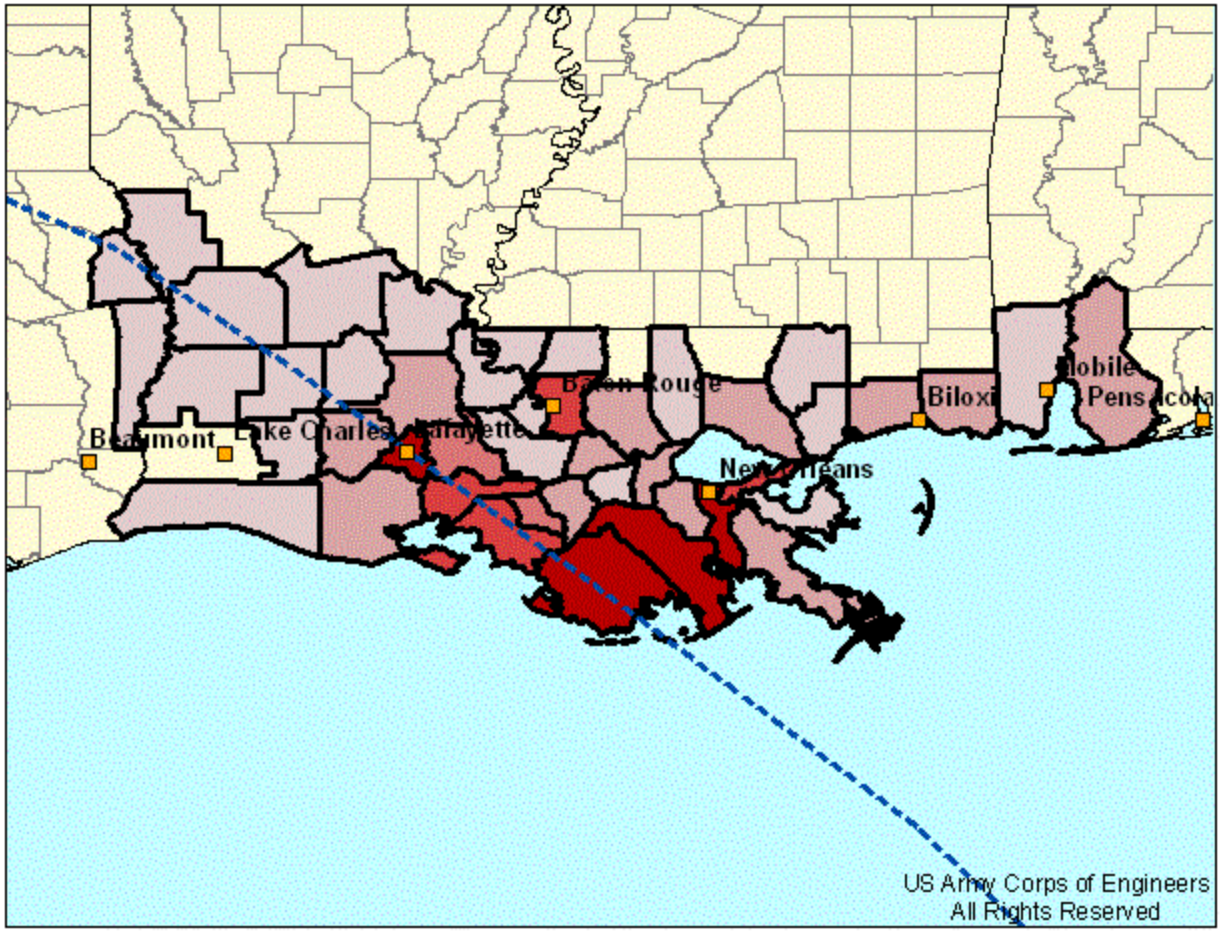
Hurricane Gustav Projected Damage Areas	
Generated By: Siemsen, LRL 1730 EDT 08/31/2008	
Sources: HURREVAC LRL-DEBRIS	Page 1 of 18

US Army Corps of Engineers

Hurricane Gustav Debris Model

Landfall Expected In About **19** Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

Louisiana - 10,783,000 Yards
Mississippi - 489,000 Yards
Alabama - 218,000 Yards
Texas - 11,000 Yards

Model results per County on following page

This model is based on a Category 3 storm making landfall south of Houma, LA.

Forecast Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 3 storm making landfall south of Houma, LA. These projections are based on information from the NHC (1700 EDT 08/31/2008) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Debris Model	
Generated By: Siemsen, LRL 1730 EDT 08/31/2008	
Sources: HURREVAC LRL-DEBRIS	Page 2 of 18

US Army Corps of Engineers

Hurricane Gustav Debris Model

Landfall Expected In About 19 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Alabama		Baldwin	130,000
		Mobile	88,000
Alabama	218,000		
Louisiana		Acadia	132,000
		Allen	42,000
		Ascension	179,000
		Assumption	200,000
		Avoyelles	7,000
		Beauregard	38,000
		Cameron	< 1,000
		East Baton Rouge	535,000
		East Feliciana	< 1,000
		Evangeline	68,000
		Iberia	616,000
		Iberville	86,000
		Jefferson	1,249,000
		Jefferson Davis	38,000
		Lafayette	1,035,000
		Lafourche	1,170,000
		Livingston	107,000
		Orleans	663,000
		Plaquemines	131,000
		Pointe Coupee	27,000
		Rapides	11,000
		Sabine	8,000
		St Bernard	50,000
		St Charles	131,000
		St James	62,000
		St John the Baptist	103,000
		St Landry	240,000

State	Yards per State	County	Yards per County
Louisiana		St Martin	329,000
(continued)		St Mary	611,000
		St Tammany	224,000
		Tangipahoa	50,000
		Terrebonne	2,347,000
		Vermilion	185,000
		Vernon	80,000
		West Baton Rouge	29,000
		West Feliciana	< 1,000
Louisiana	10,783,000		
Mississippi		Hancock	55,000
		Harrison	248,000
		Jackson	186,000
		Pearl River	< 1,000
Mississippi	489,000		
Texas		Newton	2,000
		Sabine	9,000
Texas	11,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane Gustav Debris Model

Generated By:
Siemsen, LRL 1730 EDT 08/31/2008

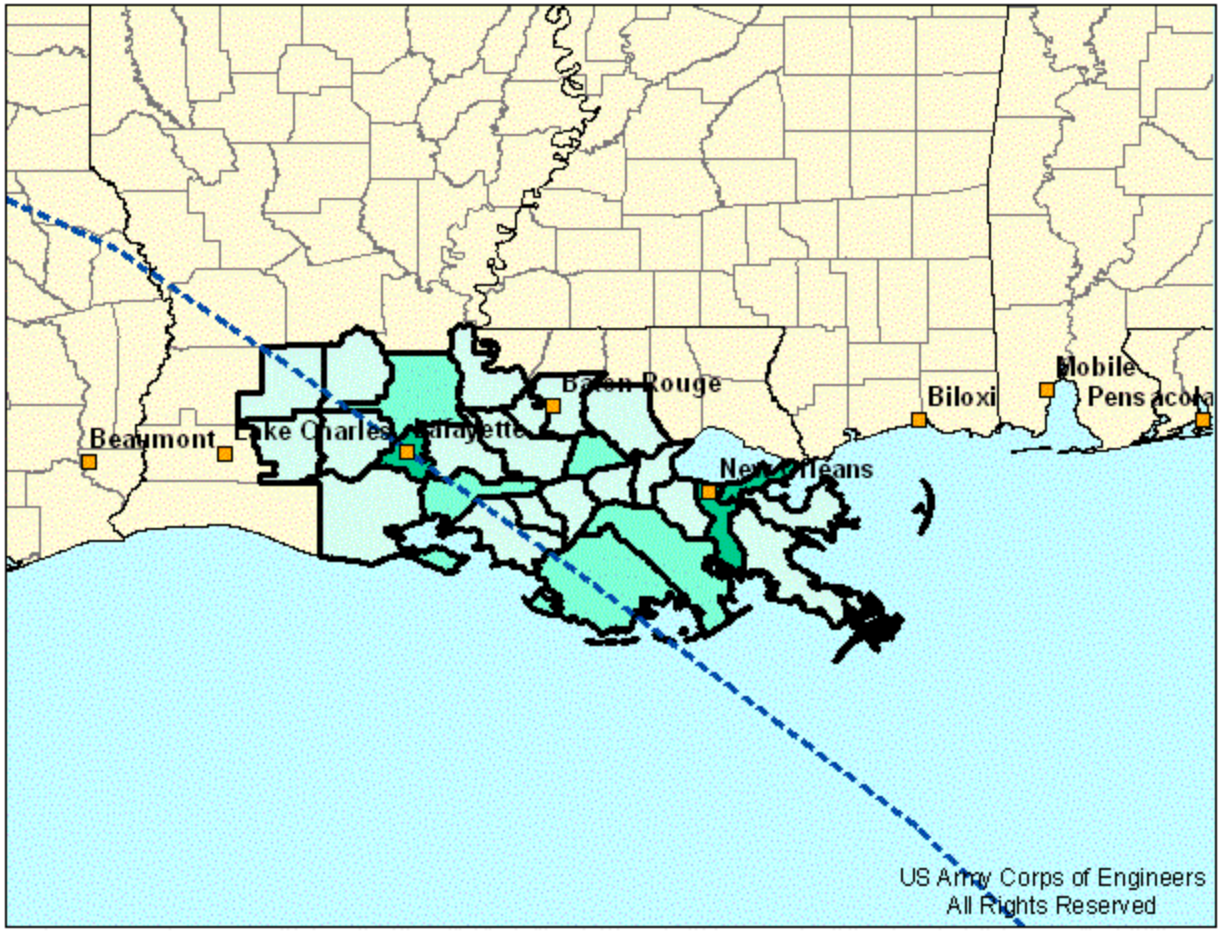
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Gustav Commodities Model

Landfall Expected In About **19** Hours

For Planning Purposes Only!



Post Landfall Water Model Results

Day One / Day Two / Day Three
Louisiana – 26/53/107 Truckloads

Model results per County on following page

This model is based on a Category 3 storm making landfall south of Houma, LA.

Forecast Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 3 storm making landfall south of Houma, LA. These projections are based on information from the NHC ***(1700 EDT 08/31/2008)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents single day needs with full distribution system in place and operating.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Commodities Model	
Generated By: Siemsen, LRL 1730 EDT 08/31/2008	
Sources: HURREVAC LRL-DEBRIS	Page 4 of 18

US Army Corps of Engineers

Hurricane Gustav Commodities Model

Landfall Expected In About 19 Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Louisiana		Acadia	4
		Allen	1
		Ascension	5
		Assumption	2
		East Baton Rouge	1
		Evangeline	1
		Iberia	5
		Iberville	2
		Jefferson	19
		Jefferson Davis	1
		Lafayette	12
		Lafourche	6
		Livingston	1
		Orleans	11
		Plaquemines	2
		Pointe Coupee	1
		St Bernard	1
		St Charles	4
		St James	2
		St John the Baptist	3
		St Landry	5
		St Martin	4
		St Mary	3
		Terrebonne	7
		Vermilion	3
		West Baton Rouge	1
Louisiana	107		

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane Gustav Commodities Model

Generated By:
Siemsen, LRL 1730 EDT 08/31/2008

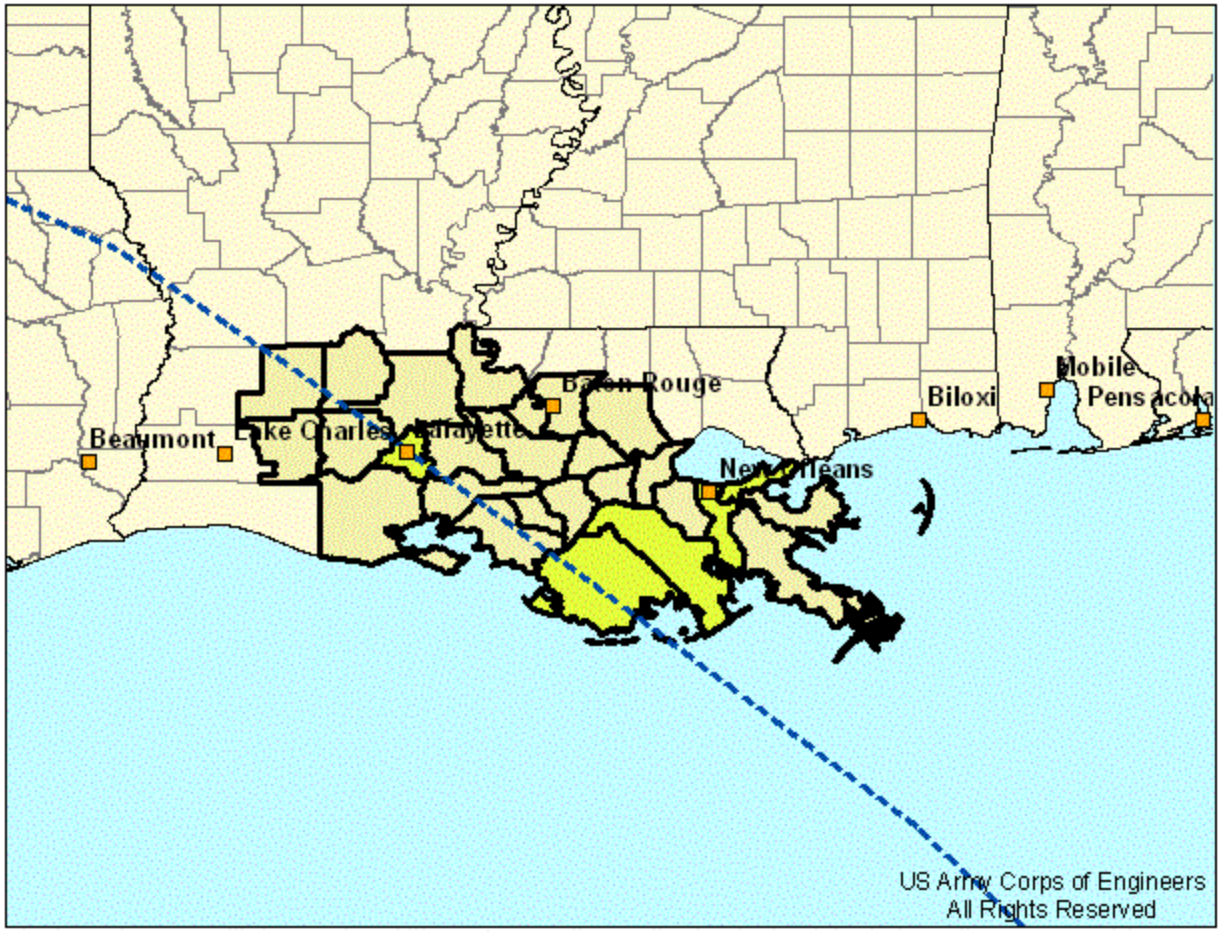
Sources:
HURREVAC
LRL-DEBRIS

Hurricane Gustav Temporary Roofing Model

US Army Corps of Engineers

Landfall Expected In About 19 Hours

For Planning Purposes Only!



Post Landfall Temporary Roofing Model Results

Louisiana - 24,900

Model results per County on following page

This model is based on a Category 3 storm making landfall south of Houma, LA.

Forecast Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 3 storm making landfall south of Houma, LA. These projections are based on information from the NHC (1700 EDT 08/31/2008) forecast. Temporary roofing is based on 3% in CAT 1, 6% in CAT 2 and 11% in CAT 3.

Details about this model may be obtained at http://www.englinkusace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Roofing Model

Generated By:
Siemsen, LRL 1730 EDT 08/31/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Gustav Temporary Roofing Model

Landfall Expected In About 19 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Louisiana		Acadia	600
		Allen	< 100
		Ascension	800
		Assumption	500
		East Baton Rouge	< 100
		Evangeline	200
		Iberia	1,600
		Iberville	400
		Jefferson	3,800
		Jefferson Davis	< 100
		Lafayette	3,200
		Lafourche	2,300
		Livingston	< 100
		Orleans	2,200
		Plaquemines	400
		Pointe Coupee	< 100
		St Bernard	200
		St Charles	600
		St James	300
		St John the Baptist	500
		St Landry	900
		St Martin	1,000
		St Mary	1,200
		Terrebonne	3,600
		Vermilion	600
		West Baton Rouge	< 100
Louisiana	24,900		

Temporary roofing is based on 3% in CAT 1, 6% in CAT 2 and 11% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Roofing Model

Generated By:
Siemsen, LRL 1730 EDT 08/31/2008

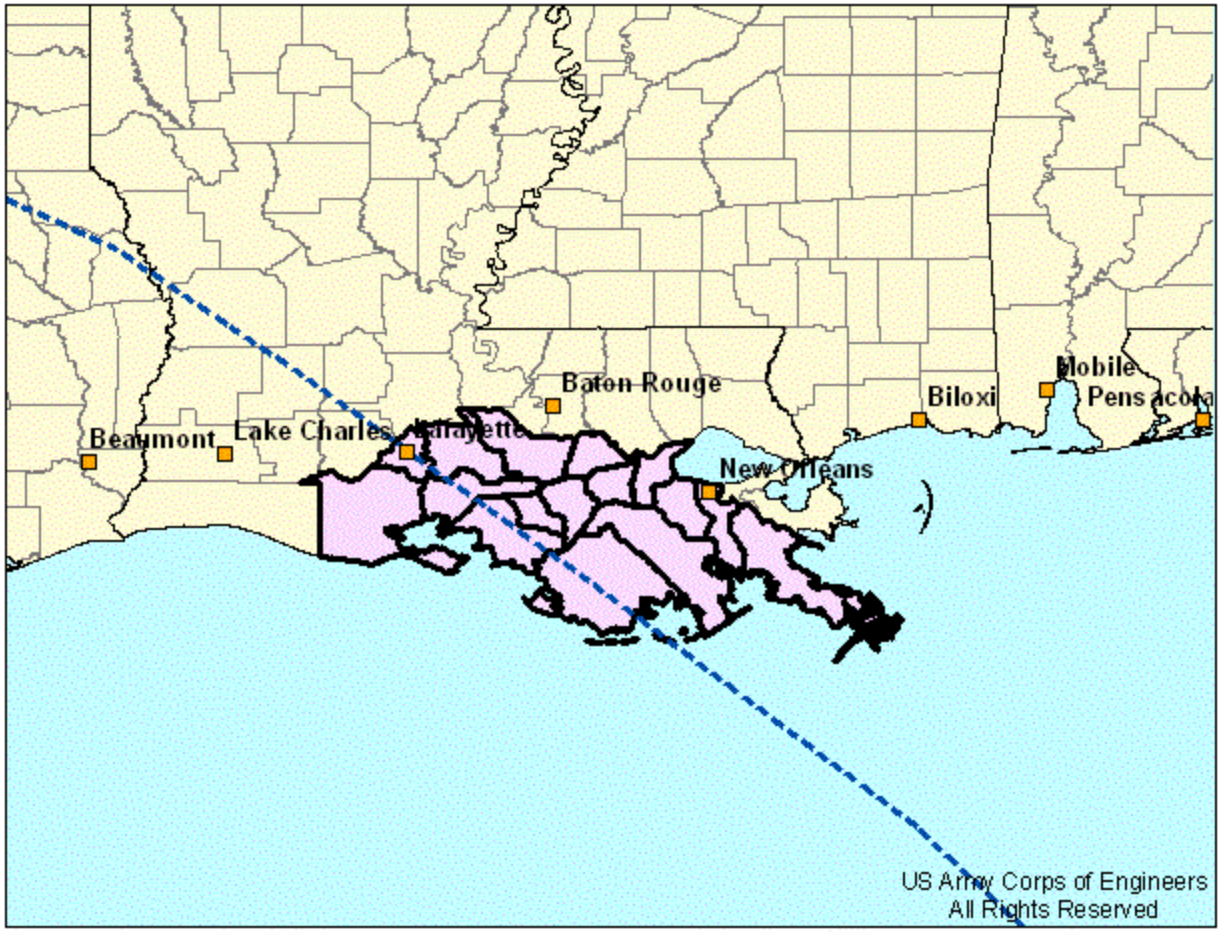
Sources:
HURREVAC
LRL-DEBRIS

Hurricane Gustav Temporary Housing Model

US Army Corps of Engineers

Landfall Expected In About 19 Hours

For Planning Purposes Only!



Post Landfall Temporary Housing Model Results

Louisiana - 2,300

Model results per County on following page

This model is based on a Category 3 storm making landfall south of Houma, LA.

Forecast Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 3 storm making landfall south of Houma, LA. These projections are based on information from the NHC (1700 EDT 08/31/2008) forecast. Temporary housing is based on 1% in CAT 2 and 2% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Housing Model	
Generated By: Siemsen, LRL 1730 EDT 08/31/2008	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Gustav Temporary Housing Model

Landfall Expected In About 19 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Louisiana		Ascension	< 100
		Assumption	< 100
		Iberia	300
		Iberville	< 100
		Jefferson	< 100
		Lafayette	400
		Lafourche	400
		Plaquemines	< 100
		St Charles	< 100
		St James	< 100
		St John the Baptist	< 100
		St Martin	200
		St Mary	300
		Terrebonne	700
		Vermilion	< 100
Louisiana	2,300		

Temporary housing is based on 1% in CAT 2 and 2% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane Gustav Housing Model

Generated By:
Siemsen, LRL 1730 EDT 08/31/2008

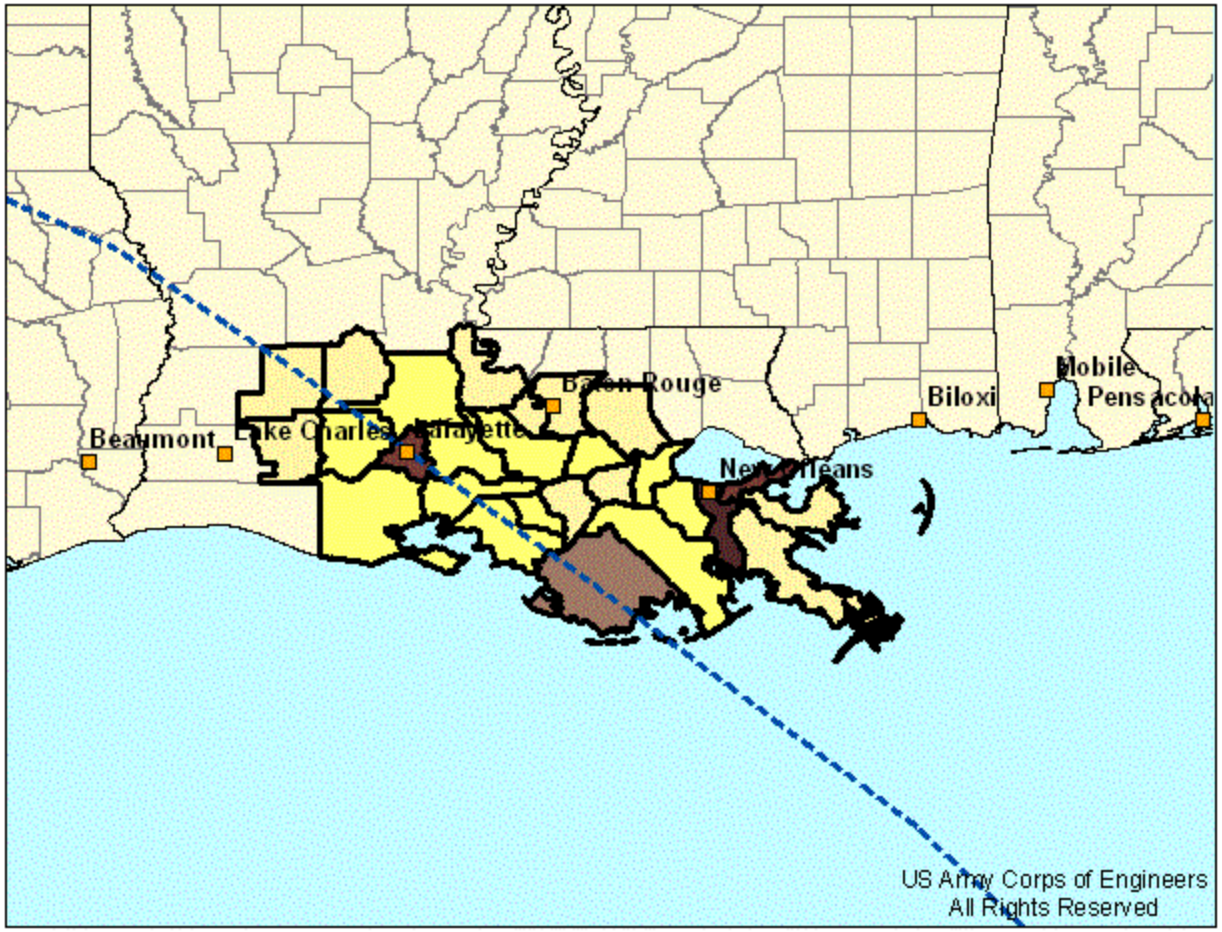
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Gustav Population Model

Landfall Expected In About **19** Hours

For Planning Purposes Only!



Post Landfall Population Model Results

Louisiana - 1,655,000

Model results per County on following page

This model is based on a Category 3 storm making landfall south of Houma, LA.

Forecast Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 3 storm making landfall south of Houma, LA. These projections are based on information from the NHC (1700 EDT 08/31/2008) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Population Model	
Generated By: Siemsen, LRL 1730 EDT 08/31/2008	
Sources: HURREVAC LRL-DEBRIS	Page 10 of 18

US Army Corps of Engineers

Hurricane Gustav Population Model

Landfall Expected In About 19 Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Louisiana		Acadia	52,000
		Allen	2,000
		Ascension	75,000
		Assumption	23,000
		East Baton Rouge	7,000
		Evangeline	14,000
		Iberia	76,000
		Iberville	31,000
		Jefferson	400,000
		Jefferson Davis	< 1,000
		Lafayette	205,000
		Lafourche	93,000
		Livingston	< 1,000
		Orleans	179,000
		Plaquemines	22,000
		Pointe Coupee	< 1,000
		St Bernard	14,000
		St Charles	52,000
		St James	22,000
		St John the Baptist	47,000
		St Landry	77,000
		St Martin	52,000
		St Mary	52,000
		Terrebonne	109,000
		Vermilion	46,000
		West Baton Rouge	5,000
Louisiana	1,655,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Population Model

Generated By:
Siemsen, LRL 1730 EDT 08/31/2008

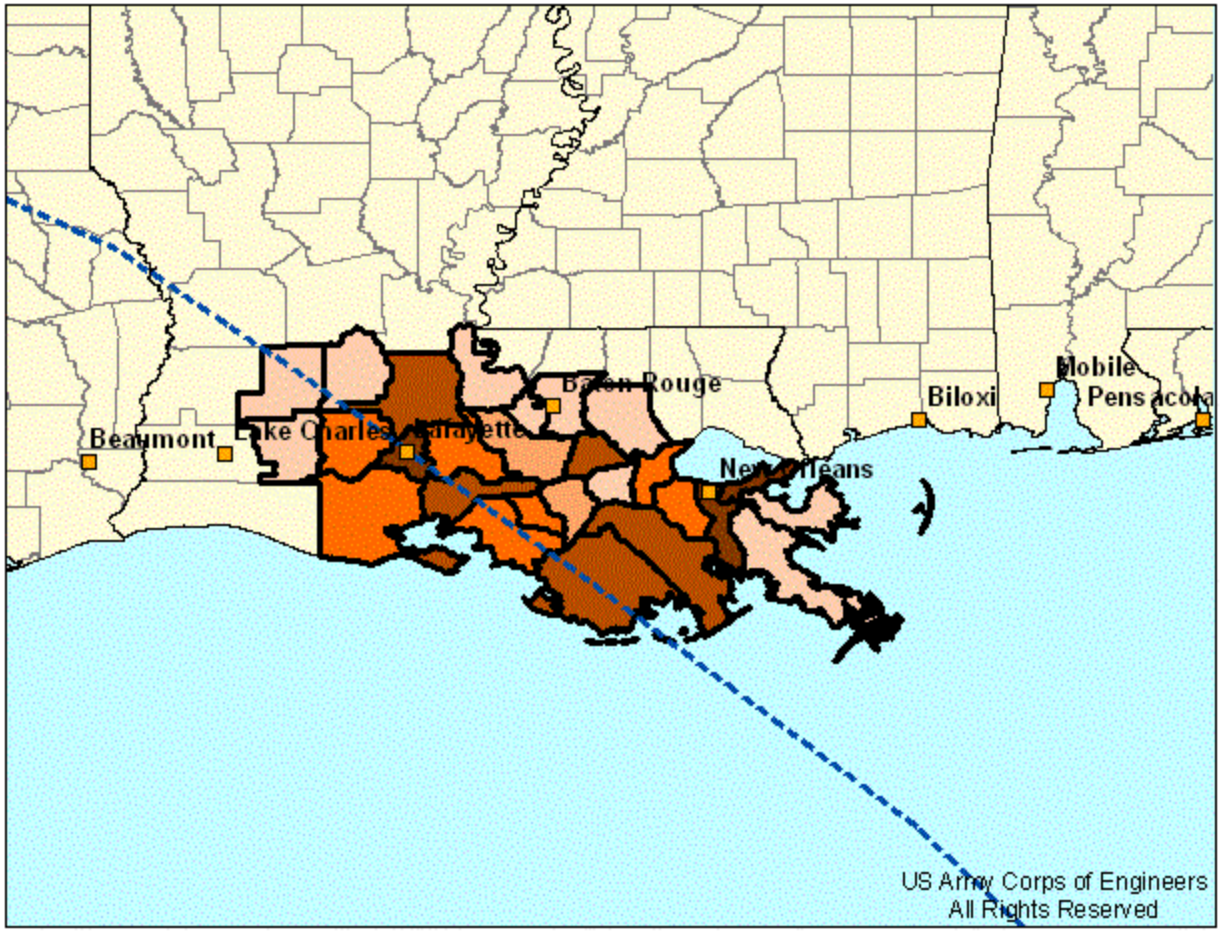
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Gustav Households Model

Landfall Expected In About 19 Hours

For Planning Purposes Only!



Post Landfall Households Model Results

Louisiana - 618,000

Model results per County on following page

This model is based on a Category 3 storm making landfall south of Houma, LA.

Forecast Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 3 storm making landfall south of Houma, LA. These projections are based on information from the NHC (1700 EDT 08/31/2008) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Households Model	
Generated By: Siemsen, LRL 1730 EDT 08/31/2008	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Gustav Households Model

Landfall Expected In About 19 Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Louisiana		Acadia	19,000
		Allen	< 1,000
		Ascension	26,000
		Assumption	9,000
		East Baton Rouge	3,000
		Evangeline	5,000
		Iberia	27,000
		Iberville	10,000
		Jefferson	155,000
		Jefferson Davis	< 1,000
		Lafayette	78,000
		Lafourche	34,000
		Livingston	< 1,000
		Orleans	72,000
		Plaquemines	8,000
		Pointe Coupee	< 1,000
		St Bernard	6,000
		St Charles	18,000
		St James	8,000
		St John the Baptist	16,000
		St Landry	29,000
		St Martin	19,000
		St Mary	19,000
		Terrebonne	38,000
		Vermilion	17,000
		West Baton Rouge	2,000
Louisiana	618,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

Details about this model may be obtained at http://www.enqlink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Households Model

Generated By:
Siemsen, LRL 1730 EDT 08/31/2008

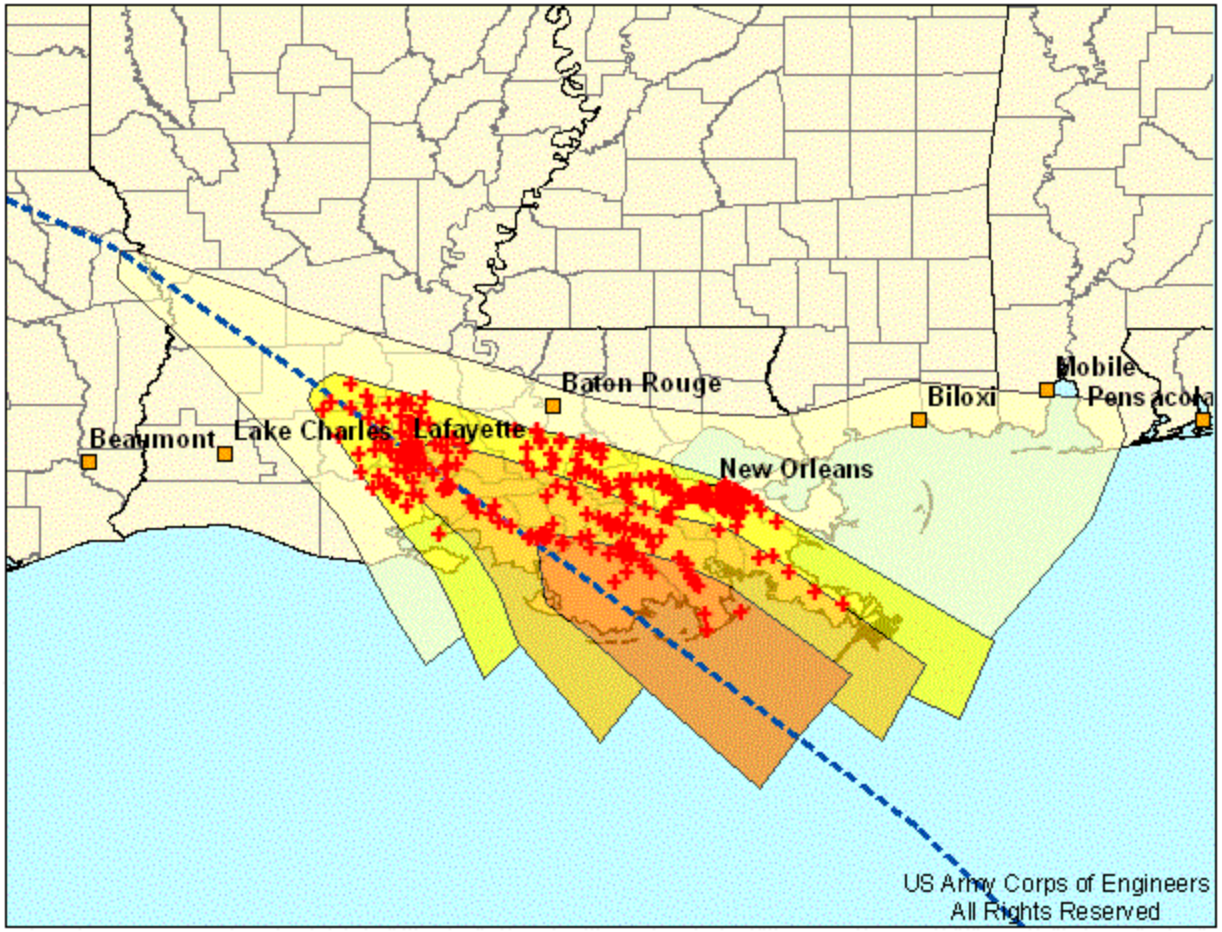
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Gustav Fire Stations

Landfall Expected In About 19 Hours

For Planning Purposes Only!



Most Probable Landfall Fire Stations Inside Hurricane Force Winds

Louisiana - 291

Model results per County on following page

This model is based on a Category 3 storm making landfall south of Houma, LA.

+ Fire Stations

Forecast Track

Information provided on this page displays a Category 3 storm making landfall south of Houma, LA. These projections are based on information from the NHC (1700 EDT 08/31/2008) forecast.

The number of fire stations included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

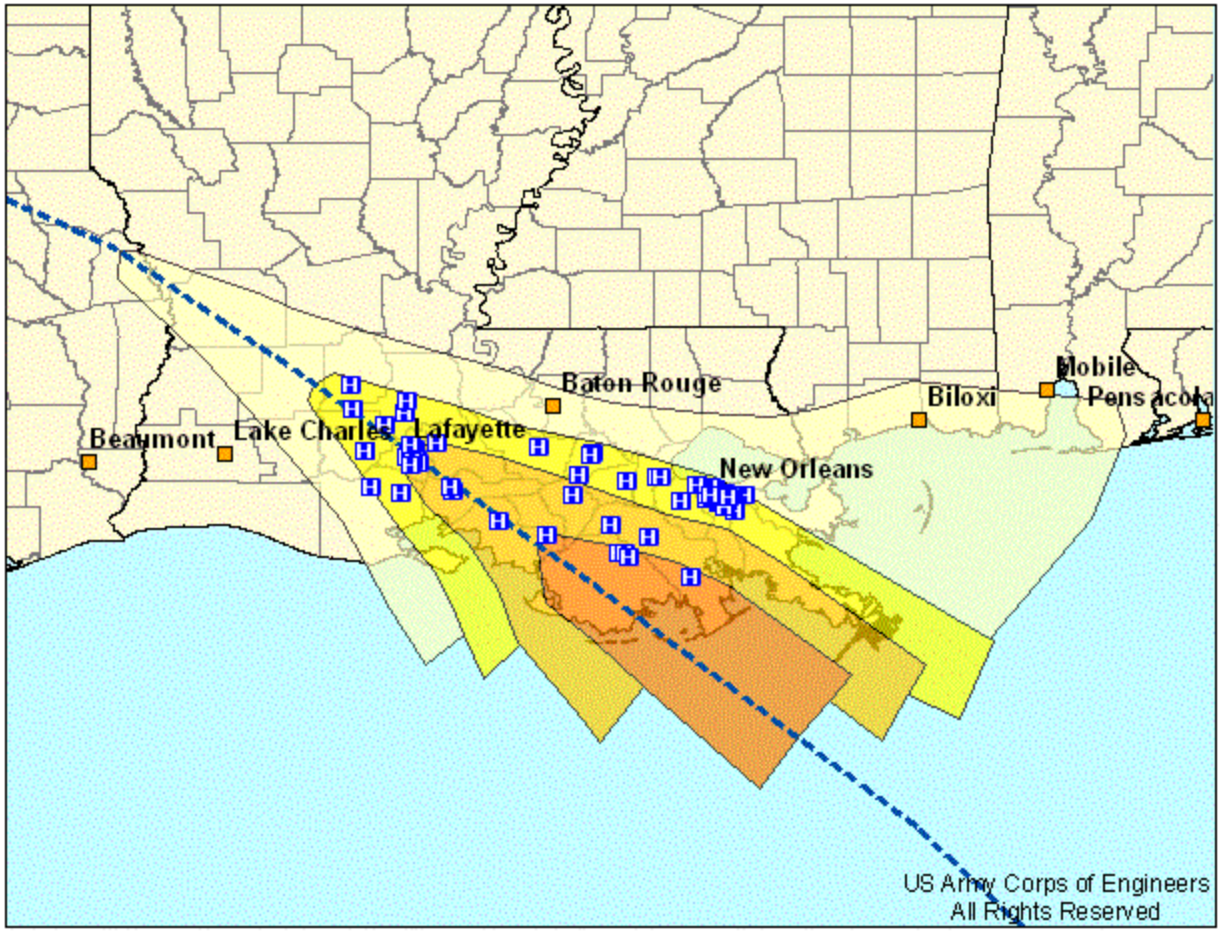
Hurricane Gustav Fire Stations	
Generated By: Siemsen, LRL 1730 EDT 08/31/2008	
Sources: HURREVAC LRL-DEBRIS	Page 14 of 18

US Army Corps of Engineers

Hurricane Gustav Hospitals

Landfall Expected In About 19 Hours

For Planning Purposes Only!



Most Probable Landfall Hospitals Inside Hurricane Force Winds

Louisiana - 72

Model results per County on following page

This model is based on a Category 3 storm making landfall south of Houma, LA.

Information provided on this page displays a Category 3 storm making landfall south of Houma, LA. These projections are based on information from the NHC (1700 EDT 08/31/2008) forecast.

The number of hospitals included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

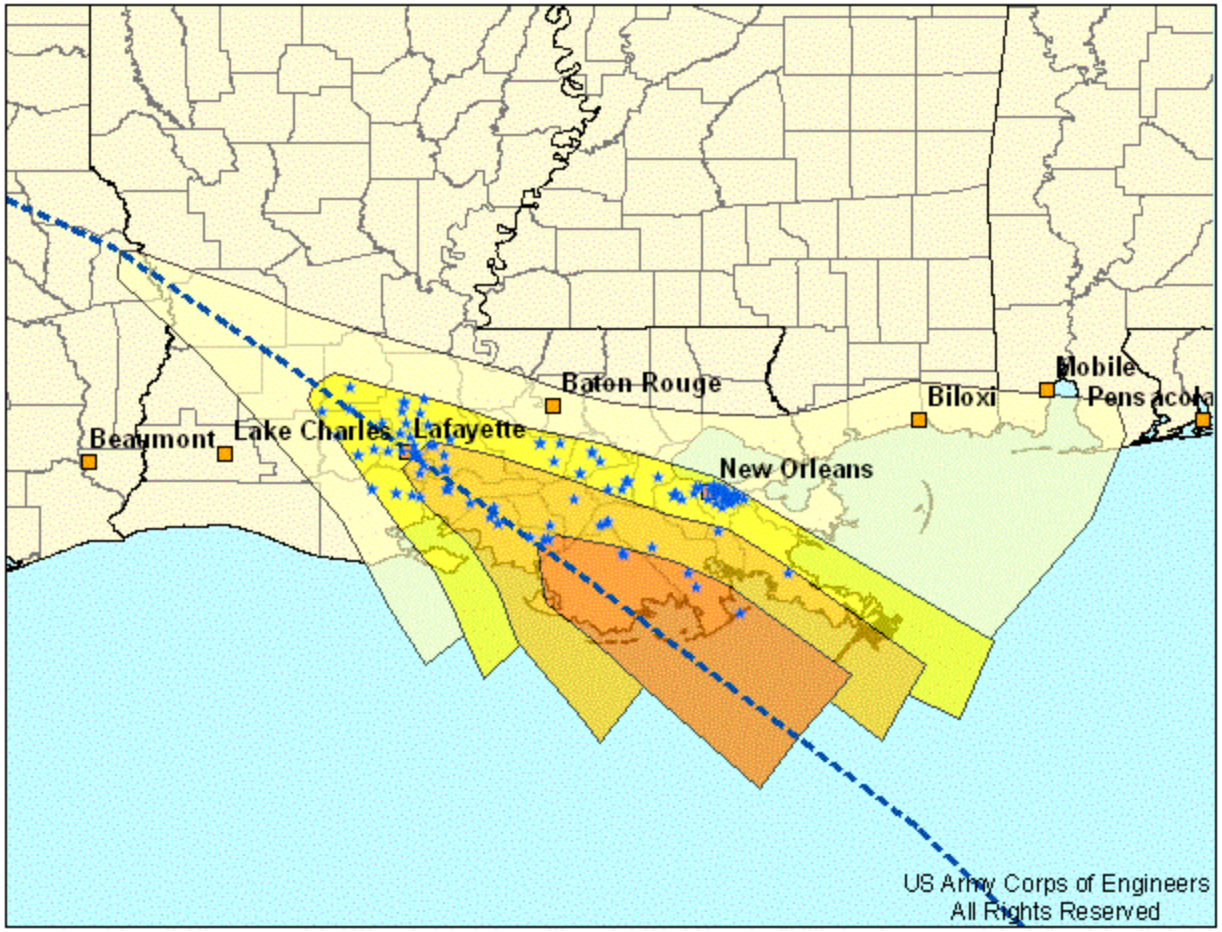
Hurricane Gustav Hospitals	
Generated By: Siemsen, LRL 1730 EDT 08/31/2008	
Sources: HURREVAC LRL-DEBRIS	Page 15 of 18

US Army Corps of Engineers

Hurricane Gustav Law Enforcement

Landfall Expected In About 19 Hours

For Planning Purposes Only!



Most Probable Landfall Law Enforcement Inside Hurricane Force Winds

Louisiana - 133

Model results per County on following page

This model is based on a Category 3 storm making landfall south of Houma, LA.

Law Enforcement

Forecast Track

Information provided on this page displays a Category 3 storm making landfall south of Houma, LA. These projections are based on information from the NHC (1700 EDT 08/31/2008) forecast.

The number of law enforcement included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

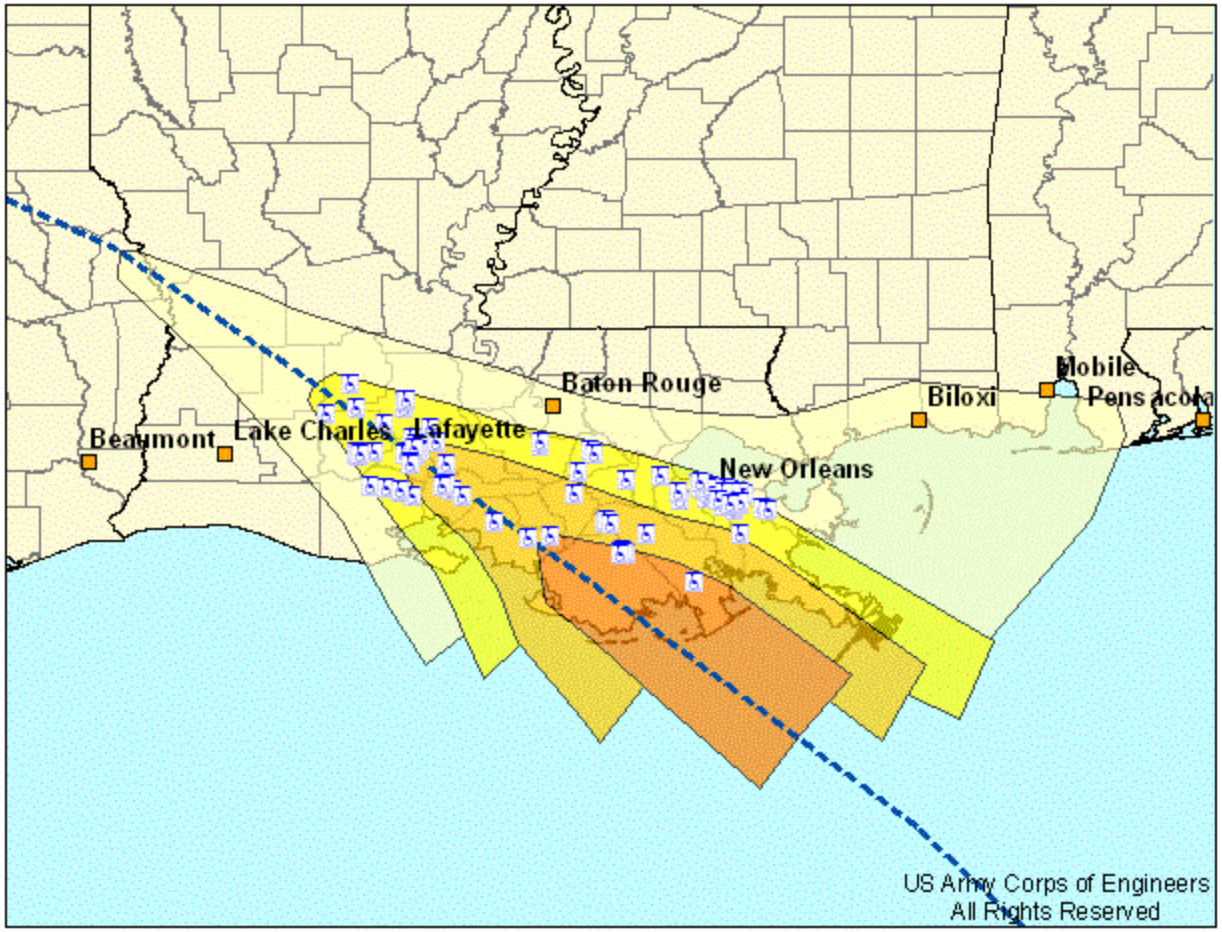
Hurricane Gustav Law Enforcement	
Generated By: Siemsen, LRL 1730 EDT 08/31/2008	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Gustav Nursing Homes

Landfall Expected In About 19 Hours

For Planning Purposes Only!



Most Probable Landfall Nursing Homes Inside Hurricane Force Winds

Louisiana - 149

Model results per County on following page

This model is based on a Category 3 storm making landfall south of Houma, LA.

Information provided on this page displays a Category 3 storm making landfall south of Houma, LA. These projections are based on information from the NHC (1700 EDT 08/31/2008) forecast.

The number of nursing homes included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

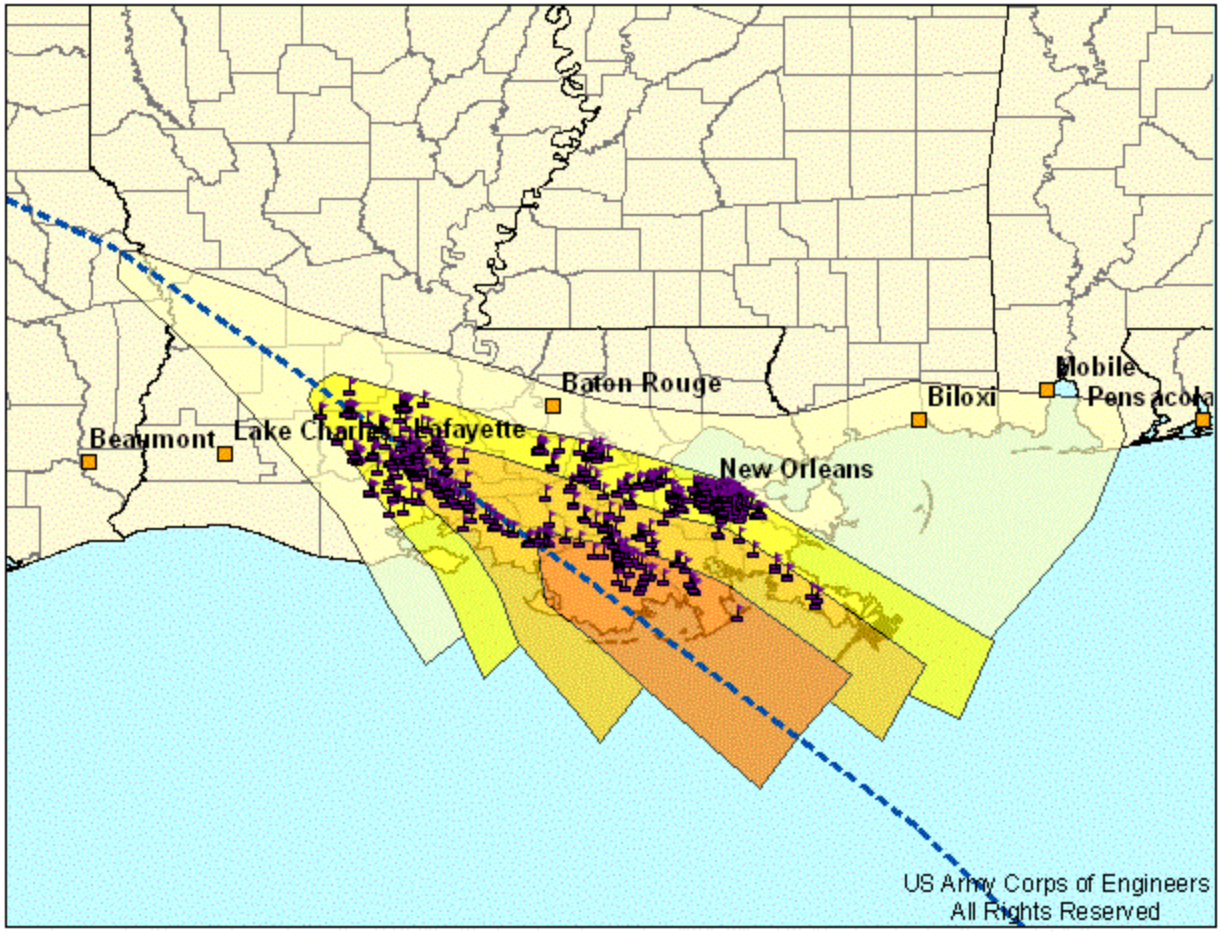
Hurricane Gustav Nursing Homes	
Generated By: Siemsen, LRL 1730 EDT 08/31/2008	
Sources: HURREVAC LRL-DEBRIS	Page 17 of 18

US Army Corps of Engineers

Hurricane Gustav Schools

Landfall Expected In About 19 Hours

For Planning Purposes Only!



Most Probable Landfall Schools Inside Hurricane Force Winds

Louisiana - 822
Mississippi - 1

Model results per County on following page

This model is based on a Category 3 storm making landfall south of Houma, LA.

Information provided on this page displays a Category 3 storm making landfall south of Houma, LA. These projections are based on information from the NHC (1700 EDT 08/31/2008) forecast.

The number of schools included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Schools	
Generated By: Siemsen, LRL 1730 EDT 08/31/2008	
Sources: HURREVAC LRL-DEBRIS	Page 18 of 18